

January 2025

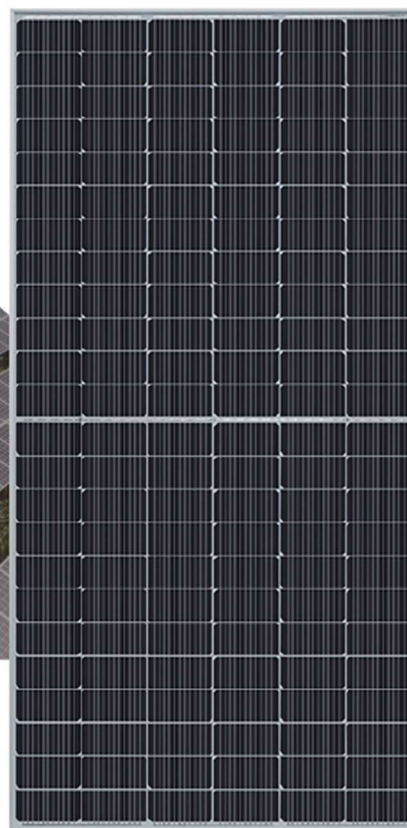
MastMinder 550 Watt PV Panels

PERC MONO SOLAR MODULE

OVERVIEW

This product is suitable for ground power plants and large projects. 182mm silicon wafers with multi-busbar and half-cut cell technologies. It can withstand harsh environments such as salt, ammonia, sand, high temperature and high humidity areas. With high module quality to ensure long-term reliability.

QUALITY CERTIFICATES



PERC high efficiency 182x91mm solar cells



Insured linear 30-year power output guarantee up to 80%, 15-year product warranty for materials and processing



PID resistant function.



Higher performance under low light environment



Low resistance loss and improved shade tolerance



Multiwire technology for superior reliability and performance

ELECTRICAL CHARACTERISTICS

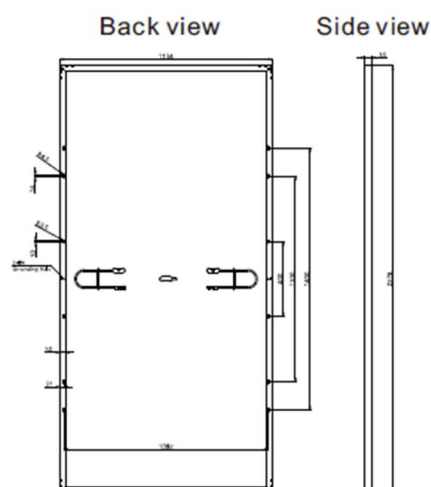
Power output (Wp)	550W
Max. power voltage (Vmp)	41.3V
Max. power current (Imp)	13.32A
Open circuit voltage (Voc)	49.62V
Short circuit current (Isc)	14.03A
Module efficiency (%)	21.30%
Maximum system voltage (V)	1500V
Maximum series fuse rating (A)	20A
Power output tolerance	±5W
FF(%)	79.02%

CONSTRUCTION

Cells	144cells
Cells size	182x91mm
Junction box	IP68
Diodes	3 by-pass diodes
Glass	3.2mm(High transmissivity low-iron tough)
Frame	Anodized aluminium alloy
Weight	28kg
Dimension	2278mm×1134mm×35mm

TEMPERATURE CHARACTERISTICS

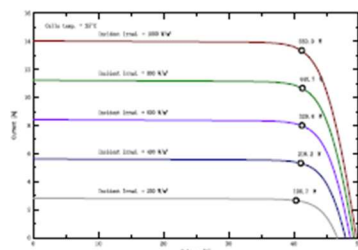
Isc (α) +0.048% / °C
Voc (β) -0.27% / °C
Pmax (γ) -0.35% / °C
Nominal operating cell temperature 45°C (+/- 2°C)



OTHER CHARACTERISTICS

Operating temperature	-40°C to 85°C
Max. load	5400Pa (front) / 2400 Pa(back)
Fire performance Class C (IEC)	Class C (IEC)
Cable length	300mm±5mm
Connector	MC4 compatible

IV curve



Power curve

